



No fee is believed due with this submission; however, the Commissioner is authorized to charge any fee required by this submission to our Deposit Account No. **50-2613**.

Respectfully submitted,

PAUL, HASTINGS, JANOFSKY & WALKER LLP

Dated: 1/25/05

By: Amy E. Simpson  
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Patent  
45385.00002.CIP

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Scott B. Wilson

Serial No.: 10/830,177

Filed: April 21, 2004

For: SYSTEMS AND METHODS FOR  
AUTOMATIC AND INCREMENTAL  
LEARNING OF PATIENT STATES  
FROM BIOMEDICAL SIGNALS

)  
) Group Art Unit: 3736  
)  
) Examiner: To be assigned  
)  
) Customer No.: 36183  
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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In compliance with the Applicant's duty under 37 CFR § 1.56, the following information is brought to the attention of the Examiner.

CERTIFICATE OF MAILING  
(37 CFR §1.8 a)

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as First Class Mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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**REFERENCES**



The references are listed on the attached Form PTO/SB/08a and copies are enclosed for the convenience of the Examiner.



Copies of the references listed on the attached Form PTO/SB/08a have already been submitted in corresponding Patent Application No. \_\_\_\_\_ and therefore, copies of the same are not enclosed.



Copies of U.S. Patent documents are not enclosed herewith

The items identified in this Supplemental Information Disclosure Statement may or may not be “material” pursuant to 37 CFR § 1.56 and the submission thereof by Applicant shall not be construed as an admission that any such patent, publication or other information referred to therein is material or considered to be material (37 CFR § 1.97(h)), or even qualifies as “prior art” 35 USC § 102 with respect to this invention unless specifically designated by Applicant as such.

The filing of this Supplemental Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information, as defined in 37 CFR § 1.56, exists.

**DISCLOSURE**

☒ The attached Supplemental IDS is being filed in accordance with 37 CFR §§ 1.97 and 1.98. This IDS is believed to be timely in that it is being submitted under 37 CFR § 1.97(b)(3), that is before the mailing of a first Office Action on the merits. Thus, no petition or fee is required. However, if the undersigned representative of Applicant is in error in this regard, then the Examiner is requested to consider this IDS as filed under § 1.97(c)

☐ The attached Supplemental Information Disclosure Statement is being filed in accordance with 37 CFR §§ 1.97(c) and 1.98. This IDS is being filed after an action on the merits but before a Final Action under § 1.113 or a Notice of Allowance under § 1.311. In the event that this IDS is not received before a Final Action under § 1.113 or a Notice of Allowance under § 1.311, the Applicant respectfully requests the filing of these papers to be considered a petition requesting consideration of this IDS pursuant to 37 CFR § 1.97(d).

☐ The attached Supplemental Information Disclosure Statement is being filed in accordance with 37 CFR §§ 1.97(d) and 1.98. This IDS is being filed after receipt of a final action but before receipt of a Notice of Allowance Under § 1.311.

**Statement Under 37 C.F.R. 1.97(e)(1) and 1.97(e)(2)**

☐ I certify that pursuant to 37 CFR 1.97(e)(1), each item of information contained in this Supplemental Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Information Disclosure Statement.

☐ I certify that pursuant to 37 CFR 1.97(e)(2), no item of information contained in this Supplemental Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the best of my knowledge, no item of information contained in this Information Disclosure Statement was known to any individual more than three months prior to the filing of this Information Disclosure Statement.

**PAYMENT METHOD**

☐ Enclosed is a check to cover the fee pursuant to 37 CFR § 1.17(p).

☒ The Examiner is hereby authorized to charge any fee due with this filing to our Deposit Account No. **50-2613**.

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Respectfully submitted,

PAUL, HASTINGS, JANOFSKY & WALKER

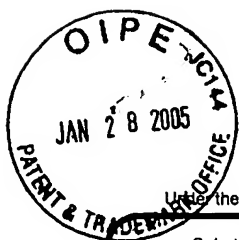
Dated: \_\_\_\_\_

1/25/05

By: \_\_\_\_\_

  
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PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 2

**Complete if Known**

|                        |                 |
|------------------------|-----------------|
| Application Number     | 10/830,177      |
| Filing Date            | April 21, 2004  |
| First Named Inventor   | Wilson          |
| Art Unit               | 3736            |
| Examiner Name          | To Be Assigned  |
| Attorney Docket Number | 45358.00002.CIP |

**U.S. PATENT DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Document Number<br>Number-Kind Code <sup>2</sup> (if known) | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|--------------------|-----------------------|---|--------------------------------|--|---|
|                    | AA                    | US-6,678,548  | Echaz et al.                   | 01-13-2004   |   |

**FOREIGN PATENT DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Foreign Patent Document<br>Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known) | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>or Relevant Figures Appear | T <sup>6</sup> |
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**NON PATENT LITERATURE DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T <sup>2</sup> |
|--------------------|-----------------------|---|----------------|
|                    | AB                    | CHEN, KE et al. "A method of combining multiple probabilistic classifiers through soft competition on different feature sets" Neurocomputing 20 (1998) 227-252.   |                |
|                    | AC                    | D'ALCHE-BUC. FLORENCE et al. "Incremental Learning Algorithms for Classification and Regression: local strategies" Universite P. et M. Curie, pp. 1-9.  |                |
|                    | AD                    | ENGELBRECHT, A.P. et al. "A Clustering Approach to Incremental Learning for Feedforward Neural Networks" Department of Computer Science, University of Pretoria, South Africa. pp. 1-6.   |                |
|                    | AE                    | MO, FAN "Power System Transients Characterization and Classification Using Wavelets and Neural Networks" IEEE, May 15, 1998, pp. 66-69.   |                |

Examiner  
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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2.0 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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| <b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b> |   | Application Number       | 10/830,177      |
|  |   | Filing Date              | April 21, 2004  |
|  |   | First Named Inventor     | Wilson          |
|  |   | Group Art Unit           | 3736            |
|  |   | Examiner Name            | To Be Assigned  |
| (use as many sheets as necessary)                        |   | Attorney Docket Number   | 45358.00002.CIP |
| Sheet  | 2 | of                       | 2               |

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|                                 | AF                    | POLIKAR, ROBI et al. "Learn++: A Classifier Independent Incremental Learning Algorithm for Supervised Neural Networks" Electrical and Computer Engineering, Rowan University. pp. 1-6  |                |
|                                 | AG                    | ROBERT, CLAUDE et al. "Electroencephalogram processing using neural networks" Clinical Neurophysiology, 113, (2002) 694-701.   |                |
|                                 | AH                    | SERPEN, GURSEL et al. "Performance analysis of probabilistic potential function neural network classifier" Electrical Engineering and Computer Science Department, University of   |                |
|                                 | AI                    | THAM, C.K. "On-Line Learning Using Hierarchical Mixtures of Experts" National University of Singapore, 99. 1-5.  |                |

|                    |                 |
|--------------------|-----------------|
| Examiner Signature | Date Considered |
|--------------------|-----------------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation is not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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